

Model No.12

Course Specifications : Test 2B

Alfarabi for Quality Assurance and Accreditation System - at 16/2/2014 4:55 PM

University : Benha university

Faculty : Shoubra Faculty of Engineering

Department : Electrical Engineering Department

1- Course Data

Course Code : EPE221 Course Title : Test 2B Study Year : Second Year

Specialization :

Teaching Hours:

Lecture :

Tutorial :

Practical : 4

Date of specifications approval: 20/6/2010

2- Course Aim

For students undertaking this course, the aims are to:

- 2.1- • Describe the basic principles of operation of electronic circuits.
- 2.2- • Give the graduates with sufficient information about the electronic circuits.
- 2.3- • Give ability to make the experimental test for AC circuits.
- 2.4- • Give ability to make the experimental test for digital circuits.
- 2.5- • Give ability to make the experimental test for magnetic circuits.

3- Intended Learning Outcomes of Course (ILOS)

a- Knowledge and Understanding

On completing this course, students will be able to:

- a.1) Describe the principles of electronic, digital and magnetic circuits. (a.1)

b- Intellectual Skills

At the end of this course, the students will be able to:

- b.1) Illustrate the different types of connections of devices for electronic, digital and magnetic circuits. (b.1)

c- Professional Skills

On completing this course, the students are expected to be able to:

- c.1) Proper use of workshop, laboratory and measuring equipment to generate valuable data. (c.1)

d- General Skills

At the end of this course, the students will be able to:

- d.1) Collaborate effectively within multidisciplinary team. (d.1)
- d.2) Work in stressful environment and within constraints. (d.2)
- d.3) Communicate effectively. (d.3)

4- Course Contents

Week No.	Topic	No. of hours	ILOs	Teaching/learning methods and strategies	Assessment method
1	Electronic circuits experiments	4	a1 b1 c1,d1	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
2	Electronic circuits experiments	4	a1 b1 c1,d2	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
3	Electronic circuits experiments	4	a1 b1 c1,d1	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
4	AC circuits experiments	4	a1 b1 c1,d2	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
5	AC circuits experiments	4	a1 b1 c1,d1	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
6	AC circuits and Digital circuits experiments	4	a1 b1 c1,d3	Presentation board, computer and data show	Home Assignments, Quizzes, Oral Exam
7	AC circuits and Digital circuits experiments	4	a1 b1 c1,d2	Classroom, computer And data show	Home Assignments, Quizzes, Oral Exam
8	Mid-term exam				
9	Digital circuits experiments	4	a1 b1 c1,d1	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
10	Digital circuits experiments	4	a1 b1 c1,d2	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
11	Magnetic circuits experiments	4	a1 b1 c1,d3	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
12	Magnetic circuits experiments	4	a1 b1 c1,d1	Classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
13	Magnetic circuits experiments	4	a1 b1 c1,d2	classroom board, computer and data show	Home Assignments, Quizzes, Oral Exam
14	Magnetic circuits	4	a1	Presentation board	Home Assignments,

	experiments		b1 c1,d1	, computer and data show	Quizzes, Oral Exam
15 16	Final exam				

5- Teaching and Learning Methods

- 5.1- Modified Lectures
- 5.2- lectures
- 5.3- Tutorial.... (√)
- 5.4- Experimental work (√)

6- Teaching and Learning Methods of Disables

None

7- Student Assessment

a- Student Assessment Methods

1	-Written examinations to assess A2,b2,c4
2	Oral examination to assess A2,b2,c4
3	Laboratory examinational to assess A2,b2,c4

b- Assessment Schedule

No.	Assessment	Week
1	Quizzes	4,6,10,12
2	Mid-term exam	8
3	practical Exam	15
4	Final exam	16

c- Weighting of Assessments

Assessment	Weight
Written examination	50 %
Oral examination	20 %
Practical/ Laboratory work	30%
Other assignments/ Class work	0%
Total	100%

8- List of References

a- Books

- 1- Course Notes by Prof. Prof. Dr. Abdel Salam Hafez A. Hamza
- 2- Experimental Course Notes by Prof. Prof. Dr. Abdel Salam Hafez A. Hamza

Matrix of course content and ILO's

Course Title: Test 2B

Code: EPE221

Lecture:

Tutorial:

Practical: 4

Total:4

Program on which the course is given: B.Sc. in Electrical Engineering (Power)

Major or minor element of program: Minor

Department offering the program: Electrical Engineering Department

Department offering the course: Electrical Engineering Department

Academic year / level: Second Year/second Semester.

Date of specifications approval: 20/6/2010

Course content	ILO a's								ILO b's								ILO c's								ILO d's		
	1								1								1								1	2	3
Electronic circuits experiments	✓								✓								✓								✓		✓
AC circuits experiments	✓								✓								✓									✓	✓
AC circuits and Digital circuits experiments	✓																✓										
Digital circuits experiments	✓								✓																✓	✓	
Magnetic circuits experiments	✓								✓								✓									✓	✓

Matrix of course aims and ILO's

Course Title: Test 2B **Code:** EPE221

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Course Aims	ILO a's							ILO b's							ILO c's							ILO d's		
	1							1							1							1	2	3
Understanding the basic principles of operation of electronic circuits	✓							✓														✓	✓	
Supplying graduates with sufficient information about the electronic circuits	✓							✓							✓								✓	
Establishing the experimental test for AC circuits	✓														✓							✓		

Course coordinator: **Prof. Dr. Abdel Salam Hafez**

Head of department: **Prof.Dr. Sayed A. Ward**